

GridScan/Mini

Technical data

Optical

Max. operating range	1 ... 10 m
Number of elements	4 ... 50
Max. ambient light	100,000 Lux
Aperture angle at 3 m	Tx: $\leq \pm 10^\circ$ and Rx: $\leq \pm 20^\circ$

Mechanical

Cross-section	12 mm × 16 mm
Max. protection height	2,500 mm
Housing material	Natural anodized aluminum
Enclosure rating	IP67
Temperature range	-40 °C ... +60 °C

Electrical

Supply voltage U _{sp}	10 ... 30 VDC
Current consumption at 24 VDC	100 mA
Output	PNP/NPN (push-pull) or FSS
Output load	100 mA, 100 nF
Typ. response time with 32 elements	90 ms
Max. door speed	2.5 m/s
Status LED Rx:	Object detected red No object detected green
Power LED Tx:	Power ok green

General

EMC emission	EN 61000-6-3:2007 EN 12016:2004
EMC immunity	EN 61000-6-2:2005 EN 12015:2004
Vibration	IEC 60068-2-6:2007
Shock	IEC 60068-2-27:2008
RoHS	2011/65/EU
Certificates	CE, CSA, TÜV
Safety category	EN ISO 13849-1:2008, Cat. 2, PL D (excl. IEC 61496-2:2006) EN 61508:2011, SIL 2 EN 12978:2009 (SB type)
Applicable standards	UL 325:2012

Types

GridScan/Mini SB	With door blanking feature according to EN 12978:2009
GridScan/Mini DB	With door blanking feature
GridScan/Mini ST	For static applications without door blanking function

Connection cable and electrical connection

Synchronization cable

Length	10 m
Diameter	Ø 3.5 mm
Material	PVC, black
Plug color	Black
Wires	AWG26
• brown	U _{sp}
• blue	GND (0 V)
• black	Communication
• white	Test signal

Connection cable

Length	5 m
Diameter	Ø 3.5 mm
Material	PVC, black
Plug color	Blue
Wires	AWG26
• brown	U _{sp}
• blue	GND (0 V)
• black	Output
• white	Test input
• gray	LO/DO selector
• green	Not used



CEDES AG is certified according to ISO 9001: 2008

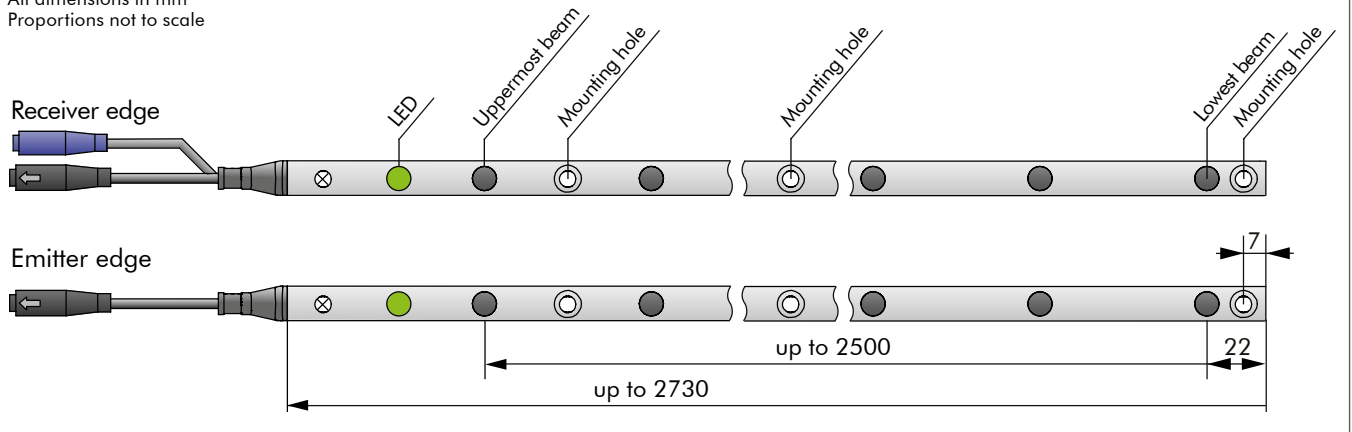
Features

- Criss-cross beams
- Safety Cat. 2 without testing FSS output
- Direct integration into the door edge (SB and DB type)
- TÜV approved
- Door speeds up to 2.5 m/s
- Waterproof housing (IP 67) and very high light reserve make GridScan/Mini insensitive to dust, dirt and water
- Electrical synchronization for increased light and strobe immunity
- Short-circuit proof semiconductor output PNP/NPN (push-pull)
- Cross section only 12 mm × 16 mm, side and front mounting possible
- Integrated door blow-out or door closed signal available



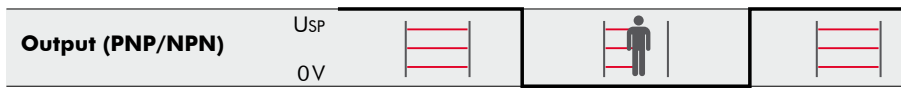
Dimensions

All dimensions in mm
Proportions not to scale

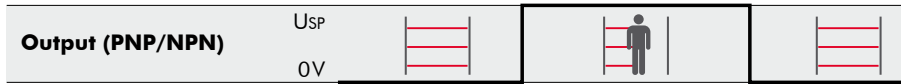


Selectable output logic

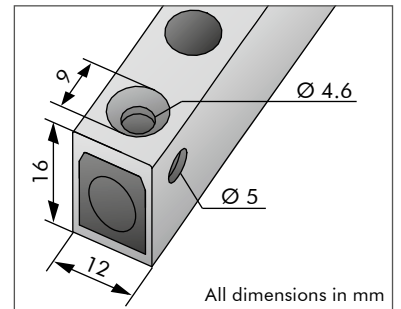
LO/DO selector connected to GND (0 V) or not connected



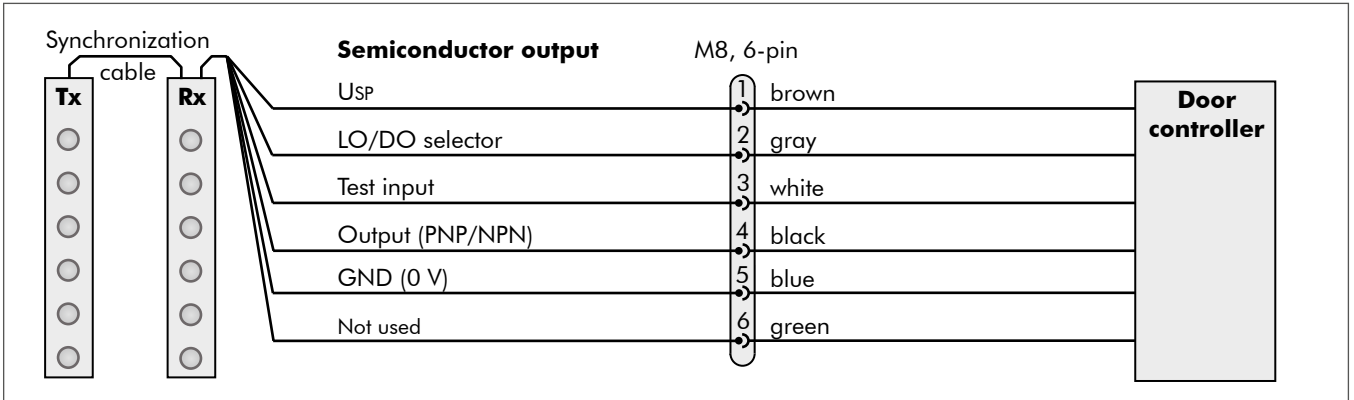
LO/DO selector connected to USP



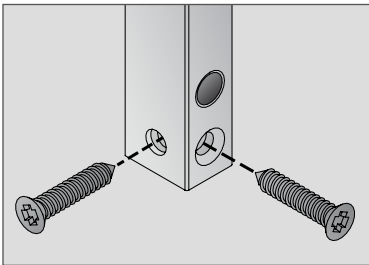
Detailed view



Connection diagram



Front and side mounting



Application examples

